

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25
SEQUENCE LISTING

<110> Bayer CropScience SA

<120> Fertile transplastomic leguminous plants

<130> BCS 02-4009

<150> FR 02 15490

<151> 2002-12-06

<160> 41

<170> PatentIn version 3.1

<210> 1

<211> 1362

<212> DNA

<213> Glycine max

<400> 1
 gatcaatcac gatcttctaa taagaacaag aaatcttttt cgcgatcaat ccttttgtcc 60
 cattcttcaa taatcagaaa gatccttttc aatcaagttt gaattttttc gtttggaatc 120
 aggactcttc tactgcattt ttattttactt tttttttatt tcttttcttc catcattcct 180
 taactcccac aagggtttggt cctgtagaat ctgaccatt tcatcattga gcgaaaagta 240
 cgaaaaaat cagatcgatt tttcgaccaa aagtactatg tgaaatcctc ggttttttcc 300
 tctttctcta tccctatctc gtaggtagag cgtttgaatc aatagagaac cctttcttct 360
 gtatctgtat gaatcgatat tattacattc caaaattcct tcccgatacc tcctaaggaa 420
 ccgaattgga tcccaaattg acgggttagt gtgagcttat ccatgcggtt atgcaccctt 480
 cgaataggaa tccattttct gaaagatccc ggctttcgtg cgttggtggg tcttcgagat 540
 cctttcgatg acctatgttg tgttgaaggg atatctatat gaaaagacag ttctatttct 600
 attctattag tattttcgat tagtattaaa ttcgttttag ttagtgatct cggctcagct 660
 agtcctttct ttcgtgatga actgttgga cctgtcttac attttgtctc tgtggaccga 720

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING. ST25

ggagaaaggg agctcagcgg caagaggatt gtaacatgag agaagcaagg aggtcaacct 780
 ttttcaaata tacaacatgg gttctggcaa tgcaatgtgg ttggactctc atgtcgatct 840
 gaatgaatca tcctttccac ggaggtaaatt ctttgcctgc taggcaagag tatagcaaatt 900
 taaaaattct gtcttggtag ggcattgtatt ttattacta ttaaattgaa gtagttaatg 960
 gtgggggttac cattatcctt tttgtggtaa cgaatatgtg ttcctaagaa aagcaatttg 1020
 tccattttttt cgggggtctcg aaggggctg gaaacacata agaactcttg aattgaaatg 1080
 gaaaaataga tgtaactcca gttacttcgg aaatggtaag atctttggcg caagaacgca 1140
 agaggagggg ttgatccgta tcatcttgac ttggttctga tttctctatt ttttaataaaa 1200
 atcgagtcgg gttcttctcc taccctgatac gaatagaaca tgcttagcca aatcttcttc 1260
 atggaaaacc tgctttattt agatcgggaa aatcatatgg ttttatgaaa tcatgtgcta 1320
 ttgctcgaat ccgtgggtcaa tcctatttcc gatagagcag tt 1362

<210> 2

<211> 1763

<212> DNA

<213> Glycine max

<400> 2

gacaatggaa tccaattttt ccataatttt cgtatccgta atagtgtgaa aagaaagcct 60
 aactccaaga agttgtttta gaatagtggc gttgagtttc ttgacccttt gccttaggat 120
 tagtcagttc tatttctcga tggaggcaag ggatataact cagcggtaga gtgtcacctt 180
 gacgtgggtg aagttatcag ttcgagcctg attatcccta aaccaatgt aagtttttct 240
 atttgtatgc cgtgatcgaa taataattga gaatggataa gaggctcgtg ggattacacg 300
 aggggtgggg gggctatatt tctgggagcg aactccagtc gaatatgaag cgcctggata 360
 caagttatgc cttggaatgg aagagaattc cgaatcagct ttgtctacga acaaggaagc 420
 tataagtaat gcaactagga atctcatgga gagttcgatc ctggctcagg atgaacgctg 480
 gcggcatgcc ttacacatgc aagtcggacg ggaagtgggtg tttccagtgg cggacgggtg 540
 agtaacgcgt aagaacctac cttggggagg ggaacaacag ctggaaacgg ctgctaatac 600
 cccgtaggct gaggagcaaa aggaggaatc cgcccagga ggggctcgcg tctgattagc 660
 tagttggtga ggcaatagct taccaaggcg atgatcagta gctgggtccga gaggatgatc 720
 agccacactg ggactgagac acggcccaga ctctacggg aggcagcagt ggggaatttt 780
 ccgcaatggg cgaaagcctg acggagcaat gccgcgtgaa ggtagaaggc ctacgggtca 840
 tgaacttctt ttcccggaga agaagcaatg acggtatccg gggaataagc atcggctaac 900

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

tctgtgccag cagccgcggt aagacagagg atgcaagcgt tatccggaat gattgggcgt	960
aaagcgtctg taggtggctt ttttaagttcg ccgtcaaadc ccagggctca accctggaca	1020
ggcggtgga actaccaagc tggagtagcg taggggcaga gggaatttcc ggtggagcgg	1080
tgaaatgcgt agagatcgga aagaacacca acggcgaaag cactctgctg ggccgacact	1140
gacactgaga gacgaaagct aggggagcga atgggattag ataccccagt agtcctagcc	1200
gtaaacgatg gatactaggc gctgtgcgta tcgaccctg caatgctgta gctaacgcgt	1260
taagtatccc gcctggggag tacgttcgca agaatgaaac tcaaaggaat tgacgggggc	1320
ccgcacaagc ggtggagcat gtggtttaat tcgatgcaaa gcgaagaacc ttaccagggc	1380
ttgacatgcc gcgaatcctc ttgaaagaga ggggtgcctt cgggaacgcg gacacaggtg	1440
gtgcatggct gtcgtcagct cgtgccgtaa ggtgttggt taagtccgc aacgagcgca	1500
accctcgtgt ttagttgcca acatttagtt tggaaccctg agcagactgc cggtgataag	1560
ccggaggaag gtgaggatga cgtcaagtca tcatgccct tatgccctgg gcgacacacg	1620
tgctacaatg gacgggacaa aggatcgca tcccgcgagg gtgagctaac tccaaaaacc	1680
cgctctcagt tcggattgta ggctgcaact cgcctgcatg aagccggaat cgctagtaat	1740
cgccggtcag ccatacggcg gtg	1763

<210> 3

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> OSSD3

<400> 3

ctaggagctc caccgccgta tggctgaccg	30
----------------------------------	----

<210> 4

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> OSSD5

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<400> 4
gtcgaccatg gactagtcca ccgcggtggt ctagactcga ggacaatgga atccaatttt 60
tcc 63

<210> 5

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> OSSG3

<400> 5
ctctccatgg gttaacaagc ttaactgctc tatcggaat aggattgacc 50

<210> 6

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> OSSG5

<400> 6
ctagtgttac cgatccaatc acgatcttct aataagaac 39

<210> 7

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> OSSG310

<400> 7
gaacctcctt gcttctctca tgttacaatc ctcttgccgc 40

<210> 8

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> OAAX3

<400> 8

ctcagtactc gagttatttg ccgactacct tggatgatctc gcc

43

<210> 9

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> OAAN5

<400> 9

gaagcttcca tggcagaagc ggtgatcgcc gaag

34

<210> 10

<211> 1327

<212> DNA

<213> Artificial sequence

<220>

<223> AADA312

<400> 10

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg 60

cagggatggc tatatttctg ggagcgaact ccgggcgaat acgaagcgct tggatacagt 120

tgtagggagg gatccatggc agaagcgggtg atcgccgaag tatcaactca actatcagag 180

gtagtggcg tcatcgagcg ccatctcgaa ccgacgttgc tggccgtaca tttgtacggc 240

tccgcagtgg atggcggcct gaagccacac agtgatattg atttgctggt tacggtgacc 300

gtaaggcttg atgaaacaac gcggcgagct ttgatcaacg accttttgga aacttcggct 360

tcccctggag agagcgagat tctccgcgct gtagaagtca ccattgttgt gcacgacgac 420

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING. ST25

atcattccgt ggcgttatcc agctaagcgc gaactgcaat ttggagaatg gcagcgcaat 480
 gacattcttg caggtatctt cgagccagcc acgatcgaca ttgatctggc tatcttgctg 540
 acaaaagcaa gagaacatag cgttgccttg gtaggtccag cggcggagga actctttgat 600
 ccggttcctg aacaggatct atttgaggcg ctaaataaaa ccttaacgct atggaactcg 660
 ccgcccgaact gggctggcga tgagcgaaat gtagtgctta cgttgtcccg ctttggttac 720
 agcgcagtaa ccggcaaaat cgcgccgaag gatgtcgctg ccgactgggc aatggagcgc 780
 ctgccggccc agtatcagcc cgtcactatt gaagctagac aggcttatct tggacaagaa 840
 gaagatcgct tggcctcgcg cgcagatcag ttggaagaat ttgtccacta cgtgaaaggc 900
 gagatcacca aggtagtcgg caaataatct agagatcctg gcctagtcta taggaggttt 960
 tgaaaagaaa ggagcaataa tcattttctt gttctatcaa gagggtgcta ttgctccttt 1020
 ctttttttct ttttatttat ttactagtat ttactttaca tagacttttt tgtttacatt 1080
 atagaaaaag aaggagaggt tattttcttg cttttattca tgattgagta ttctattttg 1140
 attttgtatt tgtttaaaat tgtagaaata gaacttggtt ctcttcttgc taatgttact 1200
 atatcttttt gatTTTTTTT ttccaaaaaa aaaatcaaat ttgacttct tcttatctct 1260
 tatctttgaa tatctcttat ctttgaaata ataatatcat tgaaataaga aagaagagct 1320
 atattcg 1327

<210> 11

<211> 1330

<212> DNA

<213> Artificial sequence

<220>

<223> AADA166

<400> 11

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg 60
 cagggatggc tatatttctg ggagcgaact ccgggcgaat acgaagcgct tggatacagt 120
 tgtagggagg gatTTTatgga tcccgaagcg gtgatcgccg aagtatcaac tcaactatca 180
 gaggtagtgt gcgtcatcga gcgccatctc gaaccgacgt tgctggccgt acatttgtag 240
 ggctccgcag tggatggcgg cctgaagcca cacagtgata ttgatttgct ggttacggtg 300
 accgtaaggc ttgatgaaac aacgcggcga gctttgatca acgacctttt ggaaacttcg 360
 gcttcccctg gagagagcga gattctccgc gctgtagaag tcaccattgt tgtgcacgac 420
 gacatcattc cgtggcggtta tccagctaag cgcgaactgc aatttgagga atggcagcgc 480

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

aatgacattc ttgcaggtat cttcgagcca gccacgatcg acattgatct ggctatcttg	540
ctgacaaaag caagagaaca tagcgttgcc ttggtaggtc cagcggcgga ggaactcttt	600
gatccggttc ctgaacagga tctatttgag gcgctaaatg aaaccttaac gctatggaac	660
tcgccgcccg actgggctgg cgatgagcga aatgtagtgc ttacgttgtc ccgcatttg	720
tacagcgag taaccggcaa aatcgcgccg aaggatgtcg ctgccgactg ggcaatggag	780
cgctgcccgg cccagtatca gcccgtcata cttgaagcta gacaggctta tcttggacaa	840
gaagaagatc gcttggcctc gcgcgcagat cagttggaag aatttgcca ctacgtgaaa	900
ggcgagatca ccaaggtagt cggcaaataa tctagcgatc ctggcctagt ctataggagg	960
ttttgaaaag aaaggagcaa taatcatttt cttgttctat caagagggtg ctattgctcc	1020
tttctttttt tctttttatt tatttactag tattttactt acatagactt ttttgtttac	1080
attatagaaa aagaaggaga gggtattttt ttgcatttat tcatgattga gtattctatt	1140
ttgattttgt atttgtttta aattgtagaa atagaacttg tttctcttct tgctaattgt	1200
actatatctt tttgattttt tttttccaaa aaaaaaatca aattttgact tcttcttatt	1260
tcttatcttt gaatatctct tatctttgaa ataataatat cattgaaata agaaagaaga	1320
gctatattcg	1330

<210> 12

<211> 1746

<212> DNA

<213> Artificial sequence

<220>

<223> AOA170

<400> 12

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgagggg	60
cagggatggc tatatttctg ggagcgaact ccgggcgaat actgaagcgc ttggatacaa	120
gttatccttg gaaggaaaga caattccgaa tctagaaata attttgttta actttaagaa	180
ggagatatac ccatgggcaa gggcgaggaa ctgttcactg gcgtgggtccc aatcttaagc	240
tccatggaat ccctgacgtt acaaccatc gcgcgggtcg atggcgccat taatttacct	300
ggctccaaaa gtgtttcaaa ccgtgctttg ctcttggtcg ctttagcttg tggtaaaacc	360
gctctgacga atctgctgga tagcgatgac gtccgccata tgctcaatgc cctgagcgcg	420
ttggggatca attacaccct ttctgccgat cgcacccgct gtgatatac gggtaatggc	480

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

ggcgcattac gtgcgccagg cgctctggaa ctgtttctcg gtaatgccgg aatcgcgatg	540
cgttcgttag cggcagcgct atgtctgggg caaaatgaga tagtgttaac cggcgaaccg	600
cgtatgaaag agcgtccgat aggccatctg gtcgattcgc tgcgtcaggg cggggcgaat	660
attgattacc tggagcagga aaactatccg cccctgcgtc tgcgcggcgg ttttaccggc	720
ggcgacattg aggttgatgg tagcgtttcc agccagttcc tgaccgctct gctgatgacg	780
gcgccgctgg cccctaaaga cacaattatt cgcgttaaag gcgaactggt atcaaaacct	840
tacatcgata tcacgctaaa tttaatgaaa acctttggcg tggagatagc gaaccaccac	900
taccaacaat ttgtcgtgaa gggaggtcaa cagtatcact ctccaggctc ctatctggtc	960
gagggcgatg cctcgtcagc gtcctatfff ctcgccgctg gggcgataaa aggcggcacg	1020
gtaaaagtga ccggaattgg ccgcaaaagt atgcagggcg atattcgttt tgccgatgtg	1080
ctggagaaaa tgggcgcgac cattacctgg ggcgatgatt ttattgcctg cacgcgcggt	1140
gaattgcacg ccatagatat ggatatgaac catattccgg atgcggcgat gacgattgcc	1200
accacggcgc tgtttgcgaa aggaaccacg acgttgcgca atatttataa ctggcgagtg	1260
aaagaaaccg atcgctgtt cgcgatggcg accgagctac gtaaagtggg cgctgaagtc	1320
gaagaagggc acgactatat tcgtatcacg ccgccggcga agctccaaca cgcggatatt	1380
ggcacgtaca acgaccaccg tatggcgatg tgcttctcac tggtcgcact gtccgatacg	1440
ccagttacga tcctggaccc taaatgtacc gcaaaaacgt tccctgatta tttcgaacaa	1500
ctggcgcgaa tgagtacgcc tgcctaattt aaatagacat tagcagataa attagcagga	1560
aataaagaag gataaggaga aagaactcaa gtaattatcc ttcgttctct taattgaatt	1620
gcaattaaac tcggcccaat cttttactaa aaggattgag ccgaatacaa caaagattct	1680
attgcatata ttttgactaa gtatatactt acctagatat acaagatttg aaatacaaaa	1740
tctagc	1746

<210> 13

<211> 1694

<212> DNA

<213> Artificial sequence

<220>

<223> AROA319

<400> 13

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg	60
cagggatggc tatatttctg ggagcgaact ccgggcgaat actgaagcgc ttggatacaa	120

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

gttatccttg gaaggaaaga caattccgaa tctagaaata attttgttta actttaagaa 180
 ggagatatac ccatggaatc cctgacgtta caacccatcg cgcgggtcga tggcgccatt 240
 aatttacctg gctccaaaag tgtttcaaac cgtgctttgc tcctggcggc tttagcttgt 300
 ggtaaaaccg ctctgacgaa tctgctggat agcgatgacg tccgccatat gctcaatgcc 360
 ctgagcgcgt tggggatcaa ttacaccctt tctgccgatc gcacccgctg tgatatcacg 420
 ggtaatggcg gcgcatcacg tgcgccaggc gctctggaac tgtttctcgg taatgccgga 480
 atcgcgatgc gttcgttagc ggcagcgcta tgtctggggc aaaatgagat agtggttaacc 540
 ggcgaaccgc gtatgaaaga gcgtccgata ggccatctgg tcgattcgct gcgtcagggc 600
 ggggcgaata ttgattacct ggagcaggaa aactatccgc ccctgcgtct gcgcggcggt 660
 tttaccggcg gcgacattga ggttgatggg agcgtttcca gccagttcct gaccgctctg 720
 ctgatgacgg cgccgctggc ccctaaagac acaattattc gcgttaaagg cgaactggta 780
 tcaaaacctt acatcgatat cacgctaaat ttaatgaaaa cctttggcgt ggagatagcg 840
 aaccaccact accaacaatt tgcgtgaag ggaggtcaac agtatcactc tccaggctcg 900
 tatctggtcg agggcgatgc ctcgctcagc tcctattttc tcgccgctgg ggcgataaaa 960
 ggcggcacgg taaaagtgac cggaattggc cgcaaaagta tgcagggcga tattcgtttt 1020
 gccgatgtgc tggagaaaat gggcgcgacc attacctggg gcgatgattt tattgcctgc 1080
 acgcgcggtg aattgcacgc catagatatg gatatgaacc atattccgga tgcggcgatg 1140
 acgattgcca ccacggcgct gtttgcgaaa ggaaccacga cgttgcgcaa tatttataac 1200
 tggcgagtga aagaaaccga tcgcctgttc gcgatggcga ccgagctacg taaagtgggc 1260
 gctgaagtcg aagaagggca cgactatatt cgtatcacgc cgccggcgaa gctccaacac 1320
 gcggatattg gcacgtacaa cgaccaccgt atggcgatgt gcttctcact ggtcgcactg 1380
 tccgatacgc cagttacgat cctggaccct aaatgtaccg caaaaacgtt ccctgattat 1440
 ttcgaacaac tggcgcgaaat gagtacgcct gcctaattta aatagacatt agcagataaa 1500
 ttagcaggaa ataaagaagg ataaggagaa agaactcaag taattatcct tcgttctctt 1560
 aattgaattg caattaaact cggcccaatc ttttactaaa aggattgagc cgaatacaac 1620
 aaagattcta ttgcatatat tttgactaag tatatactta cctagatata caagatttga 1680
 aatacaaaat ctag 1694

<210> 14

<211> 553

<212> DNA

<213> Artificial sequence

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<220>

<223> HELIO312

<400> 14

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg	60
cagggatggc tatatttctg ggagcgaact ccgggcgaat actgaagcgc ttggatacaa	120
gttatccttg gaaggaaaga caattccgaa tctagaaata attttgttta actttaagaa	180
ggagatatac ccatggataa attaattgga tcttgtgtat ggggagctgt aaattatact	240
tctgattgta atggagaatg taaaagaaga ggatataaag gaggacattg tggatctttt	300
gctaattgaa attgttggtg tgaaacttaa tctagaggaa atagacatta gcagataaat	360
tagcaggaaa taaagaagga taaggagaaa gaactcaagt aattatcctt cgttctctta	420
attgaattgc aattaaactc ggcccaatct ttactaaaa ggattgagcc gaatacaaca	480
aagattctat tgcatatatt ttgactaagt atatacttac ctagatatac aagatttgaa	540
atacaaaatc tag	553

<210> 15

<211> 1487

<212> DNA

<213> Artificial sequence

<220>

<223> HPPD323

<400> 15

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg	60
cagggatggc tatatttctg ggagcgaact ccgggcgaat actgaagcgc ttggatacaa	120
gttatccttg gaaggaaaga caattccgaa tctagaaata attttgttta actttaagaa	180
ggagatatac ccatggcaga tctatacgaa aacccaatgg gcctgatggg ctttgaattc	240
atcgaattcg cgtcgccgac gccgggtacc ctggagccga tcttcgagat catgggcttc	300
accaaagtcg cgaccaccg ttccaagaac gtgcacctgt accgccaggg cgagatcaac	360
ctgatcctca acaacgagcc caacagcatc gcctcctact ttgcggccga acacggccccg	420
tcggtgtgcg gcatggcggt ccgctgaag gactcgcaaa aggcctacaa ccgcgccctg	480
gaactcggcg ccagccgat ccatattgac accgggcccga tggaattgaa cctgccggcg	540
atcaagggca tcggcgggcg gccgttgtac ctgatcgacc gtttcggcga aggcagctcg	600

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

atctacgaca	tcgacttcgt	gtacctcgaa	gggtgtggagc	gcaatccggt	cggtgcaggt	660
ctcaaagtca	tcgaccacct	gacccacaac	gtctatcgcg	gccgcatggt	ctactgggcc	720
aactttctacg	agaaattggt	caacttccgt	gaagcgcgtt	acttcgatat	caagggcgag	780
tacaccggcc	tgacttccaa	ggccatgagt	gcgccggacg	gcatgatccg	catcccgcgtg	840
aacgaagagt	cgtccaaggg	cgcgggggcag	atcgaagagt	tcctgatgca	gttcaacggc	900
gaaggcatcc	agcacgtggc	gttcctcacc	gacgacctgg	tcaagacctg	ggacgcgttg	960
aagaaaatcg	gcatgcgctt	catgaccgcg	ccgccagaca	cttattacga	aatgctcgaa	1020
ggccgcctgc	ctgaccacgg	cgagccgggtg	gatcaactgc	aggcacgcgg	tatcctgctg	1080
gacggatctt	ccgtggaagg	cgacaaacgc	ctgctgctgc	agatcttctc	ggaaaccctg	1140
atgggcccgg	tgttcttcga	attcatccag	cgcaagggcg	acgatggggtt	tggcgagggc	1200
aacttcaagg	cgctgttcga	gtccatcgaa	cgtgaccagg	tgcgtcgtgg	tgtattgacc	1260
gccgattaat	ttaaatagac	attagcagat	aaattagcag	gaaataaaga	aggataagga	1320
gaaagaactc	aagtaattat	ccttcgttct	cttaattgaa	ttgcaattaa	actcggccca	1380
atcttttact	aaaaggattg	agccgaatac	aacaaagatt	ctattgcata	tattttgact	1440
aagtatatac	ttacctagat	atacaagatt	tgaaatacaa	aatctag		1487

<210> 16

<211> 3929

<212> DNA

<213> Artificial sequence

<220>

<223> CRYL325

<400> 16

gtccccccgc	cgctcgttcaa	tgagaatgga	taagaggctc	gtgggattga	cgtgaggggg	60
caggggatggc	tatatttctg	ggagcgaact	ccgggcgaat	actgaagcgc	ttggatacaa	120
gttatccttg	gaaggaaaga	caattccgaa	tctagaaata	attttgttta	actttaagaa	180
ggagatatac	ccatgggcaa	gggcgaggaa	ctgttcactg	gcgtgggtccc	aatcttaagc	240
tccatggata	acaatccgaa	catcaatgaa	tgcattcctt	ataattgttt	aagtaaccct	300
gaagtagaag	tattaggtgg	agaaagaata	gaaactgggt	acaccccaat	cgatatttcc	360
ttgtcgctaa	cgcaatttct	tttgagtgaa	tttgttcccg	gtgctggatt	tgtgttagga	420
ctagttgata	taatatgggg	aatttttgggt	ccctctcaat	gggacgcatt	tcttgtacaa	480

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

attgaacagt taattaacca aagaatagaa gaattcgcta ggaaccaagc catttctaga	540
ttagaaggac taagcaatct ttatcaaatt tacgcagaat ctttttagaga gtgggaagca	600
gacctaacta atccagcatt aagagaagag atgcgtattc aattcaatga catgaacagt	660
gcccttaciaa ccgctattcc tctttttgca gttcaaaatt atcaagttcc tcttttatca	720
gtatatgttc aagctgcaaa ttacattta tcagttttga gagatgtttc agtgtttgga	780
caaaggtggg gatttgatgc cgcgactatc aatagtcgtt ataatgattt aactaggctt	840
attggcaact atacagatca tgctgtacgc tgggtacaata cgggattaga gcgtgtatgg	900
ggaccggatt ctagagattg gataagatat aatcaattta gaagagaatt aacactaact	960
gtattagata tcgtttctct atttccgaac tatgatagta gaacgtatcc aattcgaaca	1020
gtttcccaat taacaagaga aatttataca aaccagtat tagaaaattt tgatggtagt	1080
tttcgaggct cggctcaggg catagaagga agtattagga gtccacattt gatggatata	1140
cttaacagta taaccatcta tacggatgct catagaggag aatattattg gtcagggcat	1200
caaataatgg cttctcctgt agggttttcg gggccagaat tcacttttcc gctatatgga	1260
actatgggaa atgcagctcc acaacaacgt attgttgctc aactagggtca gggcgtgtat	1320
agaacattat cgtccacttt atatagaaga ccttttaata tagggataaa taatcaacaa	1380
ctatctgttc ttgacgggac agaatttgct tatggaacct cctcaaattt gccatccgct	1440
gtatacagaa aaagcgggac ggtagattcg ctggatgaaa taccgccaca gaataacaac	1500
gtgccaccta ggcaaggatt tagtcatcga ttaagccatg tttcaatgtt tcgttcaggc	1560
tttagtaata gtagtgtaag tataataaga gctcctatgt tctcttgat acatcgtagt	1620
gctgaattta ataataaat tccttcatca caaattacac aaataccttt aacaaaatct	1680
actaatcttg gctctggaac ttctgtcgtt aaaggaccag gatttacagg aggagatatt	1740
cttcgaagaa cttcacctgg ccagatttca accttaagag taaatattac tgcaccatta	1800
tcacaaagat atcgggtaag aattcgctac gcttctacca caaatttaca attccataca	1860
tcaattgacg gaagacctat taatcagggg aatttttcag caactatgag tagtgggagt	1920
aatttacagt ccggaagctt taggactgta ggttttacta ctccgtttaa cttttcaa	1980
ggatcaagtg tatttacgtt aagtgtcat gtcttcaatt caggcaatga agtttatata	2040
gatcgaattg aatttgttcc ggcagaagta accttgagg cagaatatga tttagaaaga	2100
gcacaaaagg cgggtgaatga gctgtttact tcttccaatc aaatcgggtt aaaaacagat	2160
gtgacggatt atcatattga tcaagtatcc aatttagttg agtgtttatc tgatgaattt	2220
tgtctggatg aaaaaaaga attgtccgag aaagtcaaac atgcgaagcg acttagtgat	2280
gagcgggaatt tacttcaaga tccaaacttt agagggatca atagacaact agaccgtggc	2340
tggagaggaa gtacggatat taccatccaa ggaggcgatg acgtattcaa agagaattac	2400

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

```

gttacgctat tgggtacctt tgatgagtgc tacttaacgt atttatatca aaaaatagat 2460
gagtcgaaat taaaagccta taccggttac caattaagag ggtatatcga agatagtcaa 2520
gacttagaaa tctatttaat tcgctacaat gccaaacacg aaacagtaaa tgtgccaggt 2580
acgggttcct tatgggcgctt ttcagcccca agtccaatcg gaaaatgtgc ccatcattcc 2640
catcatttct ccttggacat tgatgttgga tgtacagact taaatgagga cttaggtgta 2700
tggttgatat tcaagattaa gacgcaagat ggccatgcaa gactaggaaa tctagaattt 2760
ctcgaagaga aaccattagt aggagaagca ctagctcgtg tgaaaagagc ggagaaaaaa 2820
tgagagaca aacgtgaaaa attggaatgg gaaacaaata ttgtttataa agaggcaaaa 2880
gaatctgtag atgctttatt tgtaaactct caatatgata gattacaagc ggataccaac 2940
atcgcgatga ttcatgcggc agataaacgc gttcatagca ttcgagaagc ttatctgcct 3000
gagctgtctg tgattccggg tgtcaatgcg gctatttttg aagaattaga agggcgtatt 3060
ttcactgcat tctccctata tgatgcgaga aatgtcatta aaaatggtga ttttaataat 3120
ggcttatcct gctggaacgt gaaagggcat gtagatgtag aagaacaaaa caaccaccgt 3180
tcggtccttg ttgttccgga atgggaagca gaagtgtcac aagaagttcg tgtctgtccg 3240
ggtcgtggct atatccttcg tgtcacagcg tacaaggagg gatatggaga aggttgcgta 3300
accattcatg agatcgagaa caatacagac gaactgaagt ttagcaactg tgtagaagag 3360
gaagtatatc caaacaacac ggtaacgtgt aatgattata ctgcgactca agaagaatat 3420
gagggtagct acacttctcg taatcgagga tatgacggag cctatgaaag caattcttct 3480
gtaccagctg attatgcata agcctatgaa gaaaaagcat atacagatgg acgaagagac 3540
aatccttggt aatctaacag aggatatggg gattacacac cactaccagc tggctatgtg 3600
acaaaagaat tagagtactt cccagaaacc gataaggtat ggattgagat cggagaaacg 3660
gaaggaacat tcatcgtgga cagcgtggaa ttacttctta tggaggaata atttaaatag 3720
acattagcag ataaattagc aggaaataaa gaaggataag gagaaagaac tcaagtaatt 3780
atccttcgtt ctcttaattg aattgcaatt aaactcggcc caatctttta ctaaaaggat 3840
tgagccgaat acaacaaaga ttctattgca tatattttga ctaagtatat acttacctag 3900
atatacaaga tttgaaatac aaaatctag 3929

```

<210> 17

<211> 3878

<212> DNA

<213> Artificial sequence

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<220>

<223> CRYL327

<400> 17

gctccccgc	cgtcgttcaa	tgagaatgga	taagaggctc	gtgggattga	cgtgaggggg	60
cagggatggc	tatatttctg	ggagcgaact	ccgggcgaat	actgaagcgc	ttggatacaa	120
gttatccttg	gaaggaaaga	caattccgaa	tctagaaata	attttgttta	actttaagaa	180
ggagatatac	ccatggataa	caatccgaac	atcaatgaat	gcattcctta	taattgttta	240
agtaaccctg	aagtagaagt	attaggtgga	gaaagaatag	aaactgggta	cacccaatc	300
gatatttctt	tgtcgctaac	gcaatttctt	ttgagtgaat	ttgttcccgg	tgctggattt	360
gtgttaggac	tagttgatat	aatatgggga	atttttggtc	cctctcaatg	ggacgcattt	420
cttgtaaaa	ttgaacagtt	aattaaccaa	agaatagaag	aattcgctag	gaaccaagcc	480
atcttagat	tagaaggact	aagcaatctt	tatcaaattt	acgcagaatc	ttttagagag	540
tggaagcag	atcctactaa	tccagcatta	agagaagaga	tgcgatttca	attcaatgac	600
atgaacagt	cccttacaac	cgctattcct	ctttttgcag	ttcaaaatta	tcaagttcct	660
cttttatcag	tatatgttca	agctgcaaat	ttacatttat	cagttttgag	agatgtttca	720
gtgtttggac	aaaggtgggg	atgtgatgcc	gcgactatca	atagtcgtta	taatgattta	780
actaggctta	ttggcaacta	tacagatcat	gctgtacgct	ggtacaatac	gggattagag	840
cgtgtatggg	gaccggattc	tagagattgg	ataagatata	atcaatttag	aagagaatta	900
acactaactg	tattagatat	cgtttctcta	tttccgaact	atgatagtag	aacgtatcca	960
attcgaacag	tttcccaatt	aacaagagaa	atttatacaa	accagattt	agaaaatttt	1020
gatggtagtt	ttcgaggctc	ggctcagggc	atagaaggaa	gtattaggag	tccacatttg	1080
atggatatac	ttaacagtat	aaccatctat	acggatgctc	atagaggaga	atattattgg	1140
tcagggcatc	aaataatggc	ttctcctgta	gggttttcgg	ggccagaatt	cacttttccg	1200
ctatatggaa	ctatgggaaa	tgcagctcca	caacaacgta	ttgttgctca	actaggtcag	1260
ggcgtgtata	gaacattatc	gtccacttta	tatagaagac	cttttaatat	agggataaat	1320
aatcaacaac	tatctgttct	tgacgggaca	gaatttgctt	atggaacctc	ctcaaatttg	1380
ccatccgctg	tatacagaaa	aagcggaacg	gtagattcgc	tggatgaaat	accgccacag	1440
aataacaacg	tgccacctag	gcaaggattt	agtcatcgat	taagccatgt	ttcaatgttt	1500
cgttcaggct	ttagtaatag	tagtgtaagt	ataataagag	ctcctatgtt	ctcttgata	1560
catcgtagtg	ctgaatttaa	taatataatt	ccttcatcac	aaattacaca	aataccttta	1620
acaaaatcta	ctaattcttg	ctctggaact	tctgtcgtta	aaggaccagg	atttacagga	1680
ggagatatcc	ttcgaagaac	ttcacctggc	cagatttcaa	ccttaagagt	aaatattact	1740

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

gcaccattat	cacaaagata	tcgggtaaga	attcgctacg	cttctaccac	aaattttacaa	1800
ttccatacat	caattgacgg	aagacctatt	aatcagggga	atttttcagc	aactatgagt	1860
agtgggagta	atttacagtc	cggaagcttt	aggactgtag	gttttactac	tccgtttaac	1920
ttttcaaattg	gatcaagtgt	atttacgtta	agtgtctcatg	tcttcaattc	aggcaatgaa	1980
gtttatatag	atcgaattga	atttgttccg	gcagaagtaa	ccittgaggc	agaatatgat	2040
ttagaaagag	cacaaaaggc	ggtgaatgag	ctgtttactt	cttccaatca	aatcgggtta	2100
aaaacagatg	tgacggatta	tcatattgat	caagtatcca	atttagttga	gtgtttatct	2160
gatgaatttt	gtctggatga	aaaaaaagaa	ttgtccgaga	aagtcaaaca	tgcgaagcga	2220
cttagtgatg	agcgggaattt	acttcaagat	ccaaacttta	gagggatcaa	tagacaacta	2280
gaccgtggct	ggagaggaag	tacggatatt	accatccaag	gaggcgatga	cgtattcaaa	2340
gagaattacg	ttacgctatt	gggtaccttt	gatgagtgt	acttaacgta	tttatatcaa	2400
aaaatagatg	agtcgaaatt	aaaagcctat	acccgttacc	aattaagagg	gtatatcgaa	2460
gatagtcaag	acttagaaat	ctattttaatt	cgctacaatg	caaacacga	aacagtaaatt	2520
gtgccaggta	cgggttcctt	atggcgctt	tcagcccaa	gtccaatcgg	aaaatgtgcc	2580
catcattccc	atcatttctc	cttgacatt	gatgttgat	gtacagactt	aaatgaggac	2640
ttagggtgat	gggtgatatt	caagattaag	acgcaagatg	gccatgcaag	actaggaaat	2700
ctagaatttc	tcgaagagaa	accattagta	ggagaagcac	tagctcgtgt	gaaaagagcg	2760
gagaaaaaat	ggagagacaa	acgtgaaaaa	ttggaatggg	aaacaaatat	tgtttataaa	2820
gaggcaaaag	aatctgtaga	tgctttat	gtaaactctc	aatatgatag	attacaagcg	2880
gataccaaca	tcgcgatgat	tcatgcggca	gataaacgcg	ttcatagcat	tcgagaagct	2940
tatctgcctg	agctgtctgt	gattccgggt	gtcaatgcgg	ctatTTTTga	agaattagaa	3000
gggcgtat	tttctactgcatt	ctccctatat	gatgcgagaa	atgtcattaa	aaatgggtgat	3060
tttaataatg	gcttatcctg	ctggaacgtg	aaagggcatg	tagatgtaga	agaacaaaac	3120
aaccaccgtt	cggtccttgt	tggtccggaa	tggaagcag	aagtgtcaca	agaagttcgt	3180
gtctgtccgg	gtcgtggcta	tatccttcgt	gtcacagcgt	acaaggaggg	atatggagaa	3240
ggttgcgtaa	ccattcatga	gatcgagaac	aatacagacg	aactgaagtt	tagcaactgt	3300
gtagaagagg	aagtatatcc	aaacaacacg	gtaacgtgta	atgattatac	tgcgactcaa	3360
gaagaatatg	agggtacgta	cacttctcgt	aatcagggat	atgacggagc	ctatgaaagc	3420
aattcttctg	taccagctga	ttatgcatca	gcctatgaag	aaaaagcata	tacagatgga	3480
cgaagagaca	atccttgtga	atctaacaga	ggatatgggg	attacacacc	actaccagct	3540
ggctatgtga	caaaagaatt	agagtacttc	ccagaaaccg	ataaggtatg	gattgagatc	3600

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

ggagaaacgg aaggaacatt catcgtggac agcgtggaat tacttcttat ggaggaataa 3660
 tttaaataga cattagcaga taaattagca ggaaataaag aaggataagg agaaagaact 3720
 caagtaatta tccttcgttc tcttaattga attgcaatta aactcggccc aatctttttac 3780
 taaaaggatt gagccgaata caacaaagat tctattgcat atattttgac taagtatata 3840
 cttacctaga tatacaagat ttgaaataca aaatctag 3878

<210> 18

<211> 2261

<212> DNA

<213> Artificial sequence

<220>

<223> CRY329

<400> 18

gctccccgc cgtcgttcaa tgagaatgga taagaggctc gtgggattga cgtgaggggg 60
 cagggatggc tatatttctg ggagcgaact ccgggcgaat actgaagcgc ttggatacaa 120
 gttatccttg gaaggaaaga caattccgaa tctagaaata attttgttta actttaagaa 180
 ggagatatac ccatggataa caatccgaac atcaatgaat gcattcctta taattgttta 240
 agtaaccctg aagtagaagt attaggtgga gaaagaatag aaactgggta caccccaatc 300
 gatatttcct tgtcgtaac gcaatttctt ttgagtgaat ttgttcccgg tgctggattt 360
 gtgttaggac tagttgatat aatatgggga atttttgggc cctctcaatg ggacgcattt 420
 cttgtacaaa ttgaacagtt aattaaccaa agaatagaag aattcgctag gaaccaagcc 480
 atttctagat tagaaggact aagcaatctt tatcaaattt acgcagaatc ttttagagag 540
 tgggaagcag atcctactaa tccagcatta agagaagaga tgcgtattca attcaatgac 600
 atgaacagtg cccttacaac cgctattcct ctttttgag ttcaaaatta tcaagttcct 660
 cttttatcag tatatgttca agctgcaaatt ttacatttat cagttttgag agatgtttca 720
 gtgtttggac aaagggtggg atttgatgcc gcgactatca atagtcgtta taatgattta 780
 actaggctta ttggcaacta tacagatcat gctgtacgct ggtacaatac gggattagag 840
 cgtgtatggg gaccggattc tagagattgg ataagatata atcaatttag aagagaatta 900
 acactaactg tattagatat cgtttctcta tttccgaact atgatagtag aacgtatcca 960
 attcgaacag tttcccaatt aacaagagaa atttatacaa acccagtatt agaaaatttt 1020
 gatggtagtt ttcgaggctc ggctcagggc atagaaggaa gtattaggag tccacatttg 1080
 atggatatac ttaacagtat aaccatctat acggatgctc atagaggaga atattattgg 1140

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

```

tcagggcatc aaataatggc ttctcctgta gggttttcgg ggccagaatt cacttttccg 1200
ctatatggaa ctatgggaaa tgcagctcca caacaacgta ttgttgctca actaggtcag 1260
ggcgtgtata gaacattatc gtccacttta tatagaagac cttttaatat agggataaat 1320
aatcaacaac tatctgttct tgacgggaca gaatttgctt atggaacctc ctcaaatttg 1380
ccatccgctg tatacagaaa aagcgggaac gtagattcgc tggatgaaat accgccacag 1440
aataacaacg tgccacctag gcaaggattt agtcatcgat taagccatgt ttcaatgttt 1500
cgttcaggct ttagtaatag tagtgtaagt ataataagag ctcttatgtt ctcttgata 1560
catcgtagtg ctgaatttaa taatataatt ccttcacac aaattacaca aataccttta 1620
acaaaatcta ctaatcttgg ctctggaact tctgtcgta aaggaccagg atttacagga 1680
ggagatattc ttcgaagaac ttcacctggc cagatttcaa ccttaagagt aaatattact 1740
gcaccattat cacaagata tcgggtaaga attcgctacg cttctaccac aaatttaca 1800
ttccatacat caattgacgg aagacctatt aatcagggga atttttcagc aactatgagt 1860
agtgggagta atttacagtc cggaagcttt aggactgtag gttttactac tccgtttaac 1920
ttttcaaagtg gatcaagtgt atttacgtta agtgctcatg tcttcaattc aggcaatgaa 1980
gtttatatag atcgaattga atttgttccg gcagaagtaa cctttgaggc agaatatgat 2040
taattttaat agacattagc agataaatta gcaggaaata aagaaggata aggagaaaga 2100
actcaagtaa ttatccttcg ttctcttaat tgaattgcaa ttaaactcgg cccaatcttt 2160
tactaaaagg attgagccga atacaacaaa gattctattg catatatattt gactaagtat 2220
atacttacct agatatacaa gatttgaaat acaaaatcta g 2261

```

<210> 19

<211> 48

<212> DNA

<213> Artificial sequence

<220>

<223> OTPRNC5

<400> 19

```

caattgtcgc gagaattcgc tagcggcgcc gctccccgc cgtcgttc 48

```

<210> 20

<211> 59

<212> DNA

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<213> Artificial sequence

<220>

<223> OTPRRNC3

<400> 20
atcgatccgc gggagctcgg taccatgcat cgtctagatt cggaattgtc tttccttcc 59

<210> 21

<211> 57

<212> DNA

<213> Artificial sequence

<220>

<223> OG10L5

<400> 21
tatctagaaa taattttggt taactttaag aaggagatat acccatgggc aagggcg 57

<210> 22

<211> 67

<212> DNA

<213> Artificial sequence

<220>

<223> OPGFP3

<400> 22
ggatgcattg ctttaagattg ggaccacgcc agtgaacagt tcctcgcct tgcccatggg 60
tatatct 67

<210> 23

<211> 36

<212> DNA

<213> Artificial sequence

<220>

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<223> OAROADB5

<400> 23

gccttaagct ccatggaatc cctgacgtta caaccc

36

<210> 24

<211> 38

<212> DNA

<213> Artificial sequence

<220>

<223> ORAOADB3

<400> 24

gcgatgcata atttaaatta ggcaggcgta ctcattcg

38

<210> 25

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> OSMC5

<400> 25

gaaagcttcg gaccgtagtt taaacaggcc catatggcct

40

<210> 26

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> OSMC3

<400> 26

smcgactcga gttaattaat cggcgcgcca ggccatag

39

<210> 27

<211> 48

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<212> DNA

<213> Artificial sequence

<220>

<223> OSMC51

<400> 27

gagcggccgc ctcgagcgga ccgtagttta aacaggccca tatggcct

48

<210> 28

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> OSMC31

<400> 28

gaaagctttt aattaatcgg cgcgccaggc catatg

36

<210> 29

<211> 42

<212> DNA

<213> Artificial sequence

<220>

<223> OHPPD5

<400> 29

gccttaagct ccatggcaga tctatacgaa aacccaatgg gc

42

<210> 30

<211> 43

<212> DNA

<213> Artificial sequence

<220>

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<223> OHPPD3

<400> 30

gccatttaaa ttaatcggcg gtcaatacac cagcagcac ctg

43

<210> 31

<211> 37

<212> DNA

<213> Artificial sequence

<220>

<223> OCRYWT5

<400> 31

gccttaagct ccatggataa caatccgaac atcaatg

37

<210> 32

<211> 47

<212> DNA

<213> Artificial sequence

<220>

<223> OCRYWTL3

<400> 32

gccatttaaa ttattcctcc ataagaagta attccacgct gtccacg

47

<210> 33

<211> 49

<212> DNA

<213> Artificial sequence

<220>

<223> OCRYWTC3

<400> 33

gccatttaaa ttaatcatat tctgcctcaa aggttacttc tgccggaac

49

<210> 34

<211> 23

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<212> DNA

<213> Artificial sequence

<220>

<223> P1

<400> 34
cgtatcgaat agaacatgct tag

23

<210> 35

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> P2

<400> 35
acaccatgga taaattaatt gg

22

<210> 36

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> P3

<400> 36
cctctagatt aagtttcaca ccaac

25

<210> 37

<211> 24

<212> DNA

<213> Artificial sequence

<220>

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<223> P4

<400> 37

cgtcatactt gaagctagac aggc

24

<210> 38

<211> 43

<212> DNA

<213> Artificial sequence

<220>

<223> P5

<400> 38

ctcagtactc gagttatttg ccgactacct tggatgatctc gcc

43

<210> 39

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> P6

<400> 39

gttaaggtaa cgacttcggc atgg

24

<210> 40

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> P7

<400> 40

catgggttct ggcaatgcaa tgtg

24

<210> 41

<211> 26

BCS 02-4009 - FOREIGN APPLICATION - SEQUENCE LISTING.ST25

<212> DNA

<213> Artificial sequence

<220>

<223> P8

<400> 41

caggatcgaa ctctccatga gattcc

26